UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,689	11/21/2003	Kenneth O. McElrath	3006.001900/KDG	1900

23720 7590 01/22/2008
WILLIAMS, MORGAN & AMERSON
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER	
HENDRICKSON, STUART L	

ART UNIT	PAPER NUMBER
1793	

MAIL DATE	DELIVERY MODE
01/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/719,689	MCELRATH ET AL.	
	Examiner	Art Unit	
	Stuart Hendrickson	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *37-62 and 94-96* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-62, 94-96* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

> Claims 37-62, 94-96 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support for the claimed cross-section size, nor of a 'particulate'. The structure of claim 42 is not supported. It appears that a loose mass of nanotubes is produced.

Claims 37-51, 94-96 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Li et al. 7157068.

Li teaches in col. 7 and throughout making loose nanotubes. The diameters can be the same as claimed, even though none are exemplified by the reference. No difference is seen in the product; the overlapping size range renders the claims unpatentable. In re Malagari 182 USPQ 549. Claim 47 is a process step which does not limit the product. The surface area and other properties (density, roping, claim 42, etc.) are deemed met since both the reference and specification make a loose mass of carbon nanotubes. Note the present drawings.

Claims 37-54, 94-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li taken with applicants' admissions.

Li does not teach polymers, however applicants admit that compound them is well known to make useful materials. Using the nanotubes of Li in such composites is an obvious expedient to exploit their mechanical and electrical properties.

Claims 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li taken with applicants' admissions and Dresselhaus.

Li do not teach derivatized nanotubes, however Dresselhaus teaches on pg. 408-410 derivatization to improve compounding. Derivatizing the nanotbes of Li is an obvious expedient to make them easier to form composites.

Claims 37-51, 61, 62, 94-96 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Resasco et al. 6333016.
Resasco teaches in col. 1, 6, 8 making carbon nanotubes which can be the claimed size. Also taught is use as an emitter. As above, no differences are seen in the product.

Applicant's arguments filed 11/6/07 have been fully considered but they are not persuasive.

An inaccurate description does not enable a material which was not actually made. When a description does not agree with a picture of the actual material, then it is the description that is considered inaccurate- Not the picture. There is no patentable difference between what is depicted in Li versus in the present application, even though the verbiage differs. The process steps in claim 94 are not relevant to the product claimed therein. Concerning the admissions, applicants are presumed familiar with their own specification- see pg. 4. Concerning Resasco, the reference depicts what appear to be the same materials which the present specification depicts. Claims 61 and 62 are broad and vague and do not distinguish from the teachings of Resasco, which are argued to be broad and vague. And again, the procees arguments of claim s 94-96 are not persuasive for product claims.The arguments throughout rely upon verbiage ('particulate') to distinguish, however the action explains that no differences are seen in the actual mass of nanotubes produced. Thus, the claimed products are rejected.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

Stuart Hendrickson
examiner Art Unit 1793